AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A ~~recombinant~~ variant of the Moloney murine leukemia virus reverse transcriptase of SEQ ID NO:2, wherein the ~~glutamine~~ amino acid at ~~the~~ position ~~84of 84th amino acid from the N-terminus,~~ is ~~replaced with~~ amino acid X, which is an amino acid with a side chain shorter than that of glutamine.

2. (Currently Amended) The reverse transcriptase of claim 1, wherein the ~~aspartic acid~~asparagine at ~~the~~ position ~~524of 524th amino acid,~~ is replaced with amino acid ~~asparigine~~aspartic acid.

3. (Currently Amended) The reverse transcriptase of claim 1, wherein the amino acid X is alanine, serine, aspartic acid or ~~asparigine~~asparagine.

4. (Original) The reverse transcriptase of claim 3, wherein the amino acid X is alanine.

5. (Currently Amended) ~~The sequence~~A nucleic acid molecule encoding the reverse transcriptase of claim 1.

6. (Currently Amended) A method for expressing ~~the~~ a recombinant murine leukemia virus (MLV) reverse transcriptase, said method comprising the steps of:

a) transforming an~~. In this method, the~~ expression vector carrying the coding sequence of ~~the~~ said reverse transcriptase ~~is transformed~~ into E. coli;

b) selecting positive~~. Positive~~ clones ~~are picked to~~that express ~~the~~ said ~~recombinant~~ reverse transcriptase; and

c) culturing said positive clones to express said reverse transcriptase,

wherein ~~. The~~ said reverse transcriptase is a variant of ~~referred to as the~~ MLV reverse transcriptase of SEQ ID NO:2, wherein the amino acid at ~~with the glutamine at the~~ position 84~~of the 84th amino acid replaced with~~ is amino acid X, which is an amino acid with side chain shorter than that of glutamine.

7. (Currently Amended) The method of claim 6, wherein the amino acid ~~aspartic acid~~asparagine at ~~the~~ position 524~~of 524th amino acid from the N-terminus~~ is replaced with ~~asparigine~~aspartic acid.

8. (Original) The method of claim 7, wherein the amino acid X is alanine.

9. (Currently Amended) The method of claim 8, wherein said reverse transcriptase is expressed by~~the sequence of~~ the expression plasmid having the sequence according to SEQ ID NO:1~~is listed in table 1~~.

10. (Currently Amended) The methods of claim 6, wherein ~~the~~ said E. coli strain is BL21.

11. (Currently Amended) The methods of claim 7, wherein ~~the~~ said E. coli strain is BL21.

12. (Currently Amended) The methods of claim 8, wherein ~~the~~ said E. coli strain is BL21.

13. (Cancelled).

14. (Currently Amended) The reverse transcriptase of claim 2, wherein the amino acid X is alanine, serine, aspartic acid, or ~~asparigine~~asparagine.

15. (Currently Amended) The reverse transcriptase of claim 14, wherein the amino acid ~~X~~ is alanine.

16. (New) A variant of the wild type Moloney murine leukemia virus reverse transcriptase, wherein said wild type Moloney murine leukemia virus reverse transcriptase has the amino acid sequence of SEQ ID NO:9, wherein said variant has an amino acid mutation at position 84 such that the glutamine is replaced with amino acid X, wherein said amino acid X is an amino acid with side chain shorter than that of glutamine.